

Print selected from Online sessionPage 1

(FILE 'HOME' ENTERED AT 14:06:12 ON 17 JAN 2002)

FILE 'CANCERLIT' ENTERED AT 14:06:39 ON 17 JAN 2002

L1	51976 S MELANOMA OR (SKIN (W) (CANCER OR CARCINOMA))
L2	52788 S MELANOMA OR (SKIN (W) (CANCER OR CARCINO?))
L3	79 S L2 AND MAMMAL
L4	293 S L2 AND SUNSCREEN
L5	0 S L4 AND MAMMAL
L6	38 S L4 AND (MOUSE OR MICE)

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L6	38 S L4 AND (MOUSE OR MICE)
L7	38 S L4 AND (DNA OR (NUCLEIC ACID))
L8	700 S SUNSCREEN?
L9	89 S L8 AND (DNA OR (NUCLEIC ACID?))
L10	42 S L9 AND L2

d 16 ti abs ibib 1, 3, 5, 7, 12, 13, 16, 18, 23, 25, 29, 32, 35

L6 ANSWER 1 OF 38 CANCERLIT

TI [Inhibitory effects of **sunscreens** on the development of **skin cancer**].

Inhibitorische Wirkung von Lichtschutzexterna auf die Entwicklung von Hautkrebs.

ACCESSION NUMBER: 2001088978 CANCERLIT

DOCUMENT NUMBER: 21088978

TITLE: [Inhibitory effects of **sunscreens** on the development of **skin cancer**].
Inhibitorische Wirkung von Lichtschutzexterna auf die Entwicklung von Hautkrebs.

AUTHOR: Krutmann J

CORPORATE SOURCE: Klinische und Experimentelle Photodermatologie, Universitatshautklinik Dusseldorf.

SOURCE: HAUTARZT, (2001). Vol. 52, No. 1, pp. 62-3.
Journal code: G13. ISSN: 0017-8470.

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

FILE SEGMENT: MEDL; L; I

LANGUAGE: German

OTHER SOURCE: MEDLINE 21088978

ENTRY MONTH: 200104

L6 ANSWER 3 OF 38 CANCERLIT

TI UV-induced immune suppression and **sunscreen**.

AB Sun protection factor (SPF) that measures **sunscreen** protection against erythema and edema may not be enough to measure a **sunscreen**'s activity against many other biologic reactions induced by ultraviolet radiation (UV). It may be better to evaluate **sunscreen** efficacy using various tools including immune protection factor (IPF), mutation protection factor (MPF) and protection against photocarcinogenesis. In terms of immune protection, **sunscreens** protected against UV-induced immune suppression significantly. But protection in some cases was partial and often the IPF of **sunscreens** were less than the SPF. IPF may differ with various immunological endpoints, and it may be better to use a couple of different assays to measure **sunscreen** protection more objectively. **Sunscreen** use protects against most UV-induced non-melanoma skin cancers and actinic keratoses but its activity against melanoma is not clear. More studies with broad-spectrum stable **sunscreens** and better models for the investigation of malignant melanoma are required.

ACCESSION NUMBER: 2000339947 CANCERLIT

DOCUMENT NUMBER: 20339947

TITLE: UV-induced immune suppression and **sunscreen**.

AUTHOR: Gil E M; Kim T H

CORPORATE SOURCE: Gyeongsang Institute for Neuroscience, Gyeongsang National University, Chinju, Korea.

SOURCE: PHOTODERMATOLOGY, PHOTOIMMUNOLOGY AND PHOTOMEDICINE, (2000). Vol. 16, No. 3, pp. 101-10.
Journal code: AWP. ISSN: 0905-4383.

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)

FILE SEGMENT: MEDL; L; I

LANGUAGE: English

OTHER SOURCE: MEDLINE 20339947

ENTRY MONTH: 200012

L6 ANSWER 5 OF 38 CANCERLIT

TI Inhibition of solar simulator-induced p53 mutations and protection against

skin cancer development in **mice** by **sunscreens**.

AB We demonstrated previously that p53 mutations can be detected in ultraviolet B-irradiated **mouse** skin months before the gross appearance of skin tumors and that applying sun protection factor 15 **sunscreens** to **mouse** skin before each Kodacel-filtered FS40 sunlamp irradiation resulted in the reduction of such mutations. To determine whether there is an association between reduction of ultraviolet-induced p53 mutations by **sunscreens** and protection against **skin cancer** using an environmentally relevant light source, we applied **sunscreens** (sun protection factors 15-22) on to the shaved dorsal skin of C3H **mice** 30 min before each exposure to 4.54 kJ ultraviolet B (290-400 nm) radiation per m2 from a solar simulator. Control **mice** were treated 5 d per wk with ultraviolet only or vehicle plus ultraviolet. p53 mutation analysis indicated that **mice** exposed to ultraviolet only or vehicle plus ultraviolet for 16 wk (cumulative exposure to 359 kJ ultraviolet B per m2) developed p53 mutations at a frequency of 56%-69%, respectively, but less than 5% of **mice** treated with **sunscreens** plus ultraviolet showed evidence of p53 mutations. More importantly, 100% of **mice** that received a cumulative dose of 1000 kJ ultraviolet B per m2 only, or vehicle plus ultraviolet B developed skin tumors, whereas, the probability of tumor development in all the **mice** treated with the **sunscreens** plus 1000 kJ ultraviolet B per m2 was 2% and **mice** treated with **sunscreens** plus 1500 kJ ultraviolet B per m2 was 15%. These results demonstrate that the **sunscreens** used in this study not only protect **mice** against ultraviolet-induced p53 mutations, but also against **skin cancers** induced with solar-simulated ultraviolet. Because of this association, we conclude that inhibition of p53 mutations is a useful early biologic endpoint of photoprotection against an important initiating event in ultraviolet carcinogenesis.

ACCESSION NUMBER: 1999250407 CANCERLIT
DOCUMENT NUMBER: 99250407
TITLE: Inhibition of solar simulator-induced p53 mutations and protection against **skin cancer** development in **mice** by **sunscreens**.
AUTHOR: Ananthaswamy H N; Ullrich S E; Mascotto R E; Fourtanier A; Loughlin S M; Khaskina P; Bucana C D; Kripke M L
CORPORATE SOURCE: Department of Immunology, The University of Texas M.D. Anderson Cancer Center, Houston 77030, USA.
CONTRACT NUMBER: CA 16672 (NCI)
SOURCE: JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1999). Vol. 112, No. 5, pp. 763-8.
Journal code: IHZ. ISSN: 0022-202X.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: MEDL; L; Priority Journals; Cancer Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 99250407
ENTRY MONTH: 199907

L6 ANSWER 7 OF 38 CANCERLIT

TI Inhibition of UV-induced p53 mutations by **sunscreens**: implications for **skin cancer** prevention.

AB Ultraviolet (UV) radiation is a potent human carcinogen and it induces **skin cancer** in experimental animals. Recent studies have shown that unique mutations in the p53 tumor suppressor gene contribute to the development of human and **mouse** UV-induced **skin cancers**. Such mutations are also found in sun-damaged skin and actinic keratosis, suggesting that p53 mutations arise early during UV **skin carcinogenesis**. Our studies have shown that p53 mutations can be detected in UV-irradiated **mouse** skin months

before the gross appearance of skin tumors, suggesting that p53 mutations can serve as a surrogate early biologic endpoint in **skin cancer** prevention studies. Indeed, application of sun protection factor 15 **sunscreens** to **mouse** skin before each UV irradiation resulted in an 88-92% reduction in the number of p53 mutations. Because p53 mutations represent an early essential step in photocarcinogenesis, these results imply that inhibition of this event may protect against **skin cancer** development.

ACCESSION NUMBER: 1998400808 CANCERLIT
DOCUMENT NUMBER: 98400808
TITLE: Inhibition of UV-induced p53 mutations by
sunscreens: implications for **skin cancer** prevention.
AUTHOR: Ananthaswamy H N; Loughlin S M; Ullrich S E; Kripke M L
CORPORATE SOURCE: Department of Immunology, The University of Texas M.D. Anderson Cancer Center, Houston 77030, USA.
SOURCE: JOURNAL OF INVESTIGATIVE DERMATOLOGY. SYMPOSIUM PROCEEDINGS, (1998). Vol. 3, No. 1, pp. 52-6.
Journal code: COU. ISSN: 1087-0024.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
FILE SEGMENT: MEDL; L; Priority Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 98400808
ENTRY MONTH: 199812

L6 ANSWER 12 OF 38 CANCERLIT

TI Sunlight and **skin cancer**: inhibition of p53 mutations in UV-irradiated **mouse** skin by **sunscreens**.

AB UV-induced mutations in the p53 tumor suppressor gene play an essential role in **skin cancer** development. We report here that such mutations can be detected in UV-irradiated **mouse** skin months before the gross appearance of skin tumors. Application of SPF-15 **sunscreens** to **mouse** skin before each UV irradiation nearly abolished the frequency of p53 mutations. These results indicate that p53 mutation is an early event in UV **skin carcinogenesis** and that inhibition of this event may serve as an early end point for assessing protective measures against **skin cancer** development.

ACCESSION NUMBER: 97287026 CANCERLIT
DOCUMENT NUMBER: 97287026
TITLE: Sunlight and **skin cancer**: inhibition of p53 mutations in UV-irradiated **mouse** skin by **sunscreens**.
AUTHOR: Ananthaswamy H N; Loughlin S M; Cox P; Evans R L; Ullrich S E; Kripke M L
CORPORATE SOURCE: Department of Immunology, University of Texas M.D. Anderson Cancer Center, Houston 77030, USA.
SOURCE: NATURE MEDICINE, (1997). Vol. 3, No. 5, pp. 510-4.
Journal code: CG5. ISSN: 1078-8956.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: MEDL; L; Priority Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 97287026
ENTRY MONTH: 199706

L6 ANSWER 13 OF 38 CANCERLIT

TI **Sunscreen** lotions prevent ultraviolet radiation-induced suppression of antitumor immune responses.

AB Exposure to subcarcinogenic doses of ultraviolet (UV) radiation suppresses tumor immunity, thus permitting the emergence and growth of highly

immunogenic **skin cancers** in **mice**.

Sunscreens prevent UV carcinogenesis; however, there are conflicting reports regarding their ability to block UV-induced tumor immune suppression. In this study we critically evaluated the effects of UV spectrum and dose on the tumor immune protective capacity of 4 marketed **sunscreens** lotions with labeled sun protection factors (SPF) 8-45. Effective tumor immune suppression doses (TISD), i.e., the lowest dose tested to induce outgrowth of transplanted nonmelanoma skin tumors in 100% of UV-exposed C3H **mice**, were established for 3 different UV sources. TISD were significantly lower for unfiltered (FS) and Kodacel-filtered (KFS) UVB-type FS20 sunlamps compared with a filtered xenon arc lamp solar simulator. **Sunscreen** tumor immune protection levels matched those predicted by their labeled SPF when **sunscreens**-protected **mice** were exposed to a fixed TISD of solar simulator UV radiation. SPF 30 and 45 **sunscreens** also blocked activation of tumor antigen-specific suppressor T-lymphocytes in **mice** exposed to solar simulator UV radiation. In comparison, **sunscreens** with SPF > or = 15 provided partial to complete protection, as measured by tumor incidence, for **mice** exposed to UV radiation from KFS. All **sunscreens** tested reduced tumor growth rates in KFS UV-exposed **mice**. None of the **sunscreens** tested provided measurable tumor immune protection for **mice** exposed to FS UV radiation. Thus, **sunscreen** lotions provide an extent of tumor immune protection consistent with their labeled SPF when appropriate testing conditions are employed.

ACCESSION NUMBER: 97250988 CANCERLIT
DOCUMENT NUMBER: 97250988
TITLE: **Sunscreens** lotions prevent ultraviolet radiation-induced suppression of antitumor immune responses.
AUTHOR: Roberts L K; Beasley D G
CORPORATE SOURCE: Department of Research and Development, Schering-Plough HealthCare Products, Memphis, TN 38151, USA.
LEE.ROBERTS@SPCORP.COM
SOURCE: INTERNATIONAL JOURNAL OF CANCER, (1997). Vol. 71, No. 1, pp. 94-102.
Journal code: GQU. ISSN: 0020-7136.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: MEDL; L; Priority Journals; Cancer Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 97250988
ENTRY MONTH: 199706

L6 ANSWER 16 OF 38 CANCERLIT

TI **Sunscreens**, suntans, and **skin cancer** [editorial] [see comments].

ACCESSION NUMBER: 96266808 CANCERLIT
DOCUMENT NUMBER: 96266808
TITLE: **Sunscreens**, suntans, and **skin cancer** [editorial] [see comments].
COMMENT: Comment in: BMJ 1996 Oct 12;313(7062):941-2
Comment in: BMJ 1996 Oct 12;313(7062):942
AUTHOR: McGregor J M; Young A R
SOURCE: BMJ (CLINICAL RESEARCH ED.), (1996). Vol. 312, No. 7047, pp. 1621-2.
Journal code: BMJ. ISSN: 0959-8138.
DOCUMENT TYPE: Editorial
FILE SEGMENT: MEDL; L; Abridged Index Medicus Journals; Priority Journals; Cancer Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 96266808
ENTRY MONTH: 199609

L6 ANSWER 18 OF 38 CANCERLIT

TI Differential effects of **sunscreens** on UV-induced inflammation, histopathologic alterations, and enhancement of **melanoma** growth (Meeting abstract).

AB Exposure of **mice** to ultraviolet radiation (UVR) increases the incidence of **melanomas** following injection of syngeneic **melanoma** cells into the UV-irradiated ears. The effect of UVR on **melanoma** development results from decreased immune reactivity within the UV-irradiated site. In these studies, we asked whether common **sunscreens** compounds would protect **mice** against UV-induced enhancement of **melanoma** incidence. Although **sunscreens** are effective in protecting rodent skin against UV-induced sunburn, inflammation, and **skin cancer** induction, they exhibit limited ability to protect against UV-induced immune suppression. C3H **mice** were UV-irradiated with 4.8 kJ/m² UVB from FS40 sunlamps twice per week for 3 weeks. **Sunscreens** preparations containing 7.5% 2-ethylhexyl-p-methoxycinnamate, 8% octyl-N-dimethyl-p-aminobenzoate or 6% benzophenone-3, or the vehicle alone (an oil-in-water emulsion), were applied to ears and tail of the **mice** 20 min before UV irradiation. At various times during and after the 3 week UV irradiation regimen, we determined UV-induced inflammation by measuring ear swelling. In addition, we examined the ears histologically for UV-induced alterations. One day after the final UV exposure, 2.5 x 10⁴ syngeneic K1735 **melanoma** cells were injected sc into the external ears. The tumor incidence was significantly increased in UV-irradiated **mice** compared to unirradiated **mice** throughout the monitoring period of 5-8 weeks. All three **sunscreens** completely protected against UV-induced ear swelling and clearly diminished the UV-induced histopathologic alterations, which included sunburn cell formation, epidermal hyperplasia, and mononuclear cell infiltrate in the dermis. However, the **sunscreens** failed to protect the **mice** against the UV-induced increase in **melanoma** incidence. The application of **sunscreens** or vehicle without UV irradiation did not significantly alter tumor growth. These results indicate that UV-induced inflammation, histopathologic alterations, and enhancement of **melanoma** growth depend on different mechanisms with different sensitivity for photoprotection by **sunscreens**. Moreover, protection against sunburn by **sunscreens** does not necessarily imply prevention of other effects of UVR such as enhanced **melanoma** growth.

ACCESSION NUMBER: 95607303 CANCERLIT

DOCUMENT NUMBER: 95607303

TITLE: Differential effects of **sunscreens** on UV-induced inflammation, histopathologic alterations, and enhancement of **melanoma** growth (Meeting abstract).

AUTHOR: Wolf P; Donawho C K; Kripke M L

CORPORATE SOURCE: Dept. of Immunology, UT MD Anderson Cancer Center, Houston, TX.

SOURCE: Melanoma Res, (1993). Vol. 3, pp. 48-9.

ISSN: 0960-8931.

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

FILE SEGMENT: ICDB

LANGUAGE: English

ENTRY MONTH: 199506

L6 ANSWER 23 OF 38 CANCERLIT

TI Effect of **sunscreens** on UV radiation-induced enhancement of **melanoma** growth in **mice** [see comments].

AB BACKGROUND: Epidemiologic evidence suggests that exposure to UV radiation plays a significant role in the development of **melanoma skin cancers**. As early surgical removal of the

melanoma is the only effective therapy, current strategies for reducing mortality from **melanoma** focus on prevention of the disease. Chemical **sunscreens** protect **mice** from development of **skin cancers** that resemble sunlight-induced human squamous cell cancers, but there appears to be a complex relationship between UV radiation exposure and development of **melanoma**. PURPOSE: We asked whether common **sunscreens** would protect **mice** against UV radiation-induced enhancement of **melanoma** incidence. METHODS: C3H **mice** were exposed to 4.8 kJ/m² UVB from FS40 sunlamps twice a week for 3 weeks. **Sunscreens** containing 7.5% 2-ethylhexyl-p-methoxycinnamate, 8% octyl-N-dimethyl-p-aminobenzoate, 6% benzophenone-3, or the oil-in-water vehicle alone were applied to the ears and tails of the **mice** 20 minutes before irradiation. At various times during and after exposure, we determined UV radiation-induced inflammation by measuring ear swelling. We also examined the ears histologically for UV radiation-induced alterations. One day after the final irradiation, 2.5 x 10⁴ syngeneic K1735 **melanoma** cells were injected into the external ears. **Mice** were examined weekly for tumor growth for 5-8 weeks after tumor cell injection. Control **mice** were treated in the identical way except for exposure to UV radiation. RESULTS: The incidence of **melanomas** was significantly higher in the UV-irradiated **mice**. All three **sunscreens** protected against UV radiation-induced ear swelling and clearly diminished histopathologic alterations, including sunburn cell formation, epidermal hyperplasia, and mononuclear cell infiltrate in the dermis. However, the **sunscreens** failed to protect against UV radiation-induced increase in **melanoma** incidence. The **sunscreens** or vehicle alone did not significantly alter tumor growth. CONCLUSIONS: Protection against sunburn does not necessarily imply protection against other possible UV radiation effects, such as enhanced **melanoma** growth. IMPLICATIONS: **Sunscreen** protection against UV radiation-induced inflammation may encourage prolonged exposure to UV radiation and thus may actually increase the risk of **melanoma** development. These findings suggest that further research on the ability of **sunscreens** to prevent **melanoma** is urgently needed.

ACCESSION NUMBER: 94096434 CANCERLIT
DOCUMENT NUMBER: 94096434
TITLE: Effect of **sunscreens** on UV radiation-induced enhancement of **melanoma** growth in **mice** [see comments].
COMMENT: Comment in: J Natl Cancer Inst 1993 Jan 19;86(2):78-9
Comment in: J Natl Cancer Inst 1994 May 18;86(10):798-800
Comment in: J Natl Cancer Inst 1994 May 18;86(10):800-1
Comment in: J Natl Cancer Inst 1994 Sep 21;86(18):1425-6
AUTHOR: Wolf P; Donawho C K; Kripke M L
CORPORATE SOURCE: Department of Immunology, University of Texas M. D. Anderson Cancer Center, Houston 77030.
CONTRACT NUMBER: CA16672 (NCI)
CA52457 (NCI)
SOURCE: JOURNAL OF THE NATIONAL CANCER INSTITUTE, (1994). Vol. 86, No. 2, pp. 99-105.
Journal code: J9J. ISSN: 0027-8874.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: MEDL; L; Cancer Journals; Priority Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 94096434
ENTRY MONTH: 199403

L6 ANSWER 25 OF 38 CANCERLIT
TI **Sunscreens** and the prevention of ultraviolet radiation-induced **skin cancer**.

ACCESSION NUMBER: 92325286 CANCERLIT
DOCUMENT NUMBER: 92325286
TITLE: **Sunscreens** and the prevention of ultraviolet radiation-induced **skin cancer**.
AUTHOR: Drolet B A; Connor M J
CORPORATE SOURCE: Joint Veterans Affairs Wadsworth-UCLA Dermatology Training Program, Department of Medicine, 90024.
SOURCE: JOURNAL OF DERMATOLOGIC SURGERY AND ONCOLOGY, (1992). Vol. 18, No. 7, pp. 571-6.
Journal code: HZA. ISSN: 0148-0812.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
FILE SEGMENT: MEDL; L; Priority Journals; Cancer Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 92325286
ENTRY MONTH: 199209

L6 ANSWER 29 OF 38 CANCERLIT

TI Effect of immunosuppressive agents and **sunscreens** on UV carcinogenesis in the hairless **mouse**.

AB The effect of two immunosuppressive agents, azathioprine and cyclophosphamide, with and without UVB **sunscreen** protection on UV-induced **skin carcinogenesis** was studied in the albino hairless **mouse**. In a daily treatment regime spanning 9 weeks, groups of **mice** were immunosuppressed with either drug, and were exposed to minimally erythematous doses of a light source simulating the UV portion of the solar spectrum. The accumulated UV exposure alone induced skin tumours in 77% of **mice**. Azathioprine, but not cyclophosphamide, significantly enhanced the incidence of UV tumorigenesis. Photoprotection by topical application of one of two commonly used UVB **sunscreens**, 2-ethyl-hexyl-p-methoxycinnamate (2-EHMC) or octyl-N-dimethyl-p-aminobenzoate (o-PABA), reduced the UV tumour incidence to zero in immunologically normal **mice** and to 8-15% in immunosuppressed **mice**. Unexpressed latent tumour initiations were revealed in all **sunscreen**-protected groups by the subsequent application of a tumour promoter, croton oil. In immunologically normal **mice** 2-EHMC had allowed initiations in 39% of UV-irradiated **mice**, and o-PABA in 16.5%. However, in UV-irradiated **mice** immunosuppressed with azathioprine there had been initiations in 78% of **mice** protected with 2-EHMC and 65% of **mice** protected with o-PABA. Photoprotected **mice** immunosuppressed with cyclophosphamide did not show the same increase in UV-initiations (22% with 2-EHMC, 23% with o-PABA). These results provide evidence that azathioprine increases the susceptibility of the skin to UV carcinogenesis. However, UVB **sunscreens** afford effective protection from overt tumour expression in the absence of a tumour promoter.

ACCESSION NUMBER: 86186415 CANCERLIT
DOCUMENT NUMBER: 86186415
TITLE: Effect of immunosuppressive agents and **sunscreens** on UV carcinogenesis in the hairless **mouse**.
AUTHOR: Reeve V E; Greenoak G E; Gallagher C H; Canfield P J; Wilkinson F J
SOURCE: AUSTRALIAN JOURNAL OF EXPERIMENTAL BIOLOGY AND MEDICAL SCIENCE, (1985). Vol. 63, Pt. 6, pp. 655-65.
Journal code: 9FW. ISSN: 0004-945X.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: MEDL; L; Priority Journals
LANGUAGE: English
OTHER SOURCE: MEDLINE 86186415
ENTRY MONTH: 198606

L6 ANSWER 32 OF 38 CANCERLIT

TI [SUNSCREENS DELAY UV-INDUCTION OF SKIN TUMORS].
SONNENSCHUTZMITTEL VERZOGERN DIE ENTSTEHUNG VON HAUTTUMOREN DURCH
UV-STRAHLUNG.

AB Two **sunscreens** preparations, Piz Buin (**sunscreens** factor 6) and Sea and Ski (**sunscreens** factor 5), were tested for the ability to delay the development of **skin cancers** in pigmented hairless **mice** exposed to UV. Tumor development was delayed by 7 wk with Sea and Ski and 11 wk with Piz Buin. The interval between the beginning of aggressive tumor growth and the death of the animals was the same for all test groups. The **sunscreens** were not carcinogenic in unirradiated **mice**. Toxic side effects were observed most often with Piz Buin. (no Refs)

ACCESSION NUMBER: 83605985 CANCERLIT

DOCUMENT NUMBER: 83605985

TITLE: [SUNSCREENS DELAY UV-INDUCTION OF SKIN TUMORS].
SONNENSCHUTZMITTEL VERZOGERN DIE ENTSTEHUNG VON HAUTTUMOREN
DURCH UV-STRAHLUNG.

AUTHOR: Wulf H C; Brodthagen H

CORPORATE SOURCE: (c/o A. Wiskemann) Universitats-Hautklinik, D-2000 Hamburg
20, W. Germany.

SOURCE: Z Hautkr, (1983). Vol. 58, No. 1, pp. 64.

ISSN: 0301-0481.

DOCUMENT TYPE: (MEETING PAPER)

FILE SEGMENT: ICDB

LANGUAGE: German

ENTRY MONTH: 198303

L6 ANSWER 35 OF 38 CANCERLIT

TI **Sunscreens** for delay of ultraviolet induction of skin tumors.

AB **Sunscreens** with different sun protection factors (SPFs) have been tested for their capability of delaying or preventing actinic damage and **skin cancer** development in groups of hairless, pigmented **mice** exposed to artificial ultraviolet (UV) light of increasing intensity. The dose delivered was less than or equal to 1 minimal erythema dose (MED) in the group of untreated **mice**, so that the **mice** to which **sunscreens** were applied never obtained a sunburn after UV exposure. The quality of UV light was similar to bright midday sun at a latitude of 56 degrees (city of Copenhagen). Tumorigenesis was demonstrated to be delayed corresponding to the SPF claimed by the manufacturer, but almost all of the UV-irradiated **mice** developed skin tumors. Histologic examination revealed actinic degeneration and tumors of squamous cell type with marked variation in differentiation. Metastases to lymph nodes and lungs were found in only 10%. Toxic reactions, such as eczematous-like skin reactions, dark coloring, and amyloidosis, were observed predominantly in the group treated with the **sunscreens** of highest SPF value. Long-term investigations seem to be necessary to unveil these problems--in particular, the specific SPF value, in **sunscreens**, that should be recommended to the public for prevention or delay of actinic damage and/or cancer development.

ACCESSION NUMBER: 83031417 CANCERLIT

DOCUMENT NUMBER: 83031417

TITLE: **Sunscreens** for delay of ultraviolet induction of
skin tumors.

AUTHOR: Wulf H C; Poulsen T; Brodthagen H; Hou-Jensen K

SOURCE: JOURNAL OF THE AMERICAN ACADEMY OF DERMATOLOGY, (1982).

Vol. 7, No. 2, pp. 194-202.

Journal code: HVG. ISSN: 0190-9622.

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

FILE SEGMENT: MEDL; L; Priority Journals

Print selected from Online sessionPage 9

LANGUAGE:	English
OTHER SOURCE:	MEDLINE 83031417
ENTRY MONTH:	198301